

# **Exhibit 9**



Cornell University  
Animal Health Diagnostic Center

240 Farrier Road, Cornell University, Ithaca, NY 14853  
Ph: 607-253-3900 Fax: 607-253-3943  
<https://ahdc.vet.cornell.edu>

Owner: Christopher Casacci

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***Finalized Report***

Accession Number: 115730-18

Summer Street Cat Clinic - (2437)  
2323 N Forest Rd  
Getzville, NY 14068  
(716) 689-2287

Sampled: 06/22/2018

Received: 06/26/2018

Finalized: 07/11/2018

Reference Number: Christopher Casacci

**Accession Comments**

Additional deceased on 119055-18 mla21

**Anatomic Pathology**

Department of Biomedical Sciences  
Director Dr. Teresa Southard  
Phone: 607-253-3319 | Fax: 607-253-3357

1 Male - Feline Feline, Nos Male

Body, Whole

Necropsy, Final

Pathologist: Gerald E. Duhamel, DVM, Ph.D, Dipl. ACVP

Resident Pathologist: Alina Demeter, DVM, Ph.D

Final Report

**Final Diagnoses:**

Sepsis, presumptive

Myocarditis

**Final Comment:**

Histopathological examination reveals lesions in the spleen, liver and myocardium that are most compatible with a disseminated bacterial infection (sepsis); however, bacteriological culture would be required in order to confirm this interpretation. Other causes of disseminated inflammation and necrosis including toxoplasmosis cannot be ruled out completely. The grossly presumed parasitic cyst in the myocardium corresponds to an area of severe inflammation and loss of cardiomyocytes and likely account for the demise of his cat. If aerobic bacteriological culture is desired, please contact the Anatomic Pathology service office in writing either via fax to (607) 253-3357 or email to [pathologyservice@cornell.edu](mailto:pathologyservice@cornell.edu) and quote case accession number 115730-18.

There is also a background of emaciation characterized by serous atrophy of fat in the bone marrow.

The severe lymphoid depletion is most likely attributable to severe stress; however, an underlying viral infection might account for this change. The findings in the lung are most likely agonal. The peliosis hepatitis is considered incidental in this case.

1 Male - Feline Feline. Nos Male

### Histologic Findings:

Heart: Severe, locally extensive, subacute, lymphoplasmacytic and neutrophilic myocarditis with cardiomyocyte degeneration and necrosis

Liver:

1. Moderate, multifocal, acute hepatocellular necrosis
2. Multifocal peliosis hepatitis

Bone marrow:

1. Serous atrophy of fat
2. Myeloid hyperplasia

Spleen: Severe, diffuse, depletion and lymphocytolysis of periarteriolar lymphoid sheaths with red pulp histiocytosis

Lung: Mild, multifocal, acute, pulmonary edema and mild, multifocal atelectasis

### Histologic Description:

The following tissues are examined:

Slide 1: Heart, liver

Slide 2: Kidney, lung

Slide 3: Spleen, bone marrow, kidney

Slide 4: Duodenum, pancreas, urinary bladder, stomach

Slide 5: Large intestine, mesenteric lymph node, small intestine

Slide 6: Brain

Histopathologic changes are detected in these tissues:

Heart (slide 1; 2 sections): In 1 section (apex) in a locally extensive area, extending from the epicardium into the myocardium is a hypercellular infiltrate of neutrophils and fewer lymphocytes and plasma cells. Within the infiltrate are rare entrapped cardiomyocytes, intensely eosinophilic with fragmentation and loss of striations (degeneration). Frequently some of the affected cardiomyocytes have loss of structure (necrosis). Affecting both sections the epicardium is infiltrated by a mild to moderate number of neutrophils and rare lymphocytes that are multifocally extending in the myocardium.

Liver (slide 1; 2 sections): Affecting both sections in multifocal areas are large lake like accumulations of red blood cells (peliosis). In multifocal to coalescing areas, randomly distributed, are focal areas of necrosis, characterized by swollen, pale eosinophilic hepatocytes with loss of structure, admixed with cellular debris, fibrin and scattered neutrophils and lymphocytes.

Lung (slide 2; 5 sections): In locally extensive areas of alveolar space is compressed (atelectasis). Occasionally some of the alveoli contain a pale eosinophilic, amorphous, acellular material, admixed with a few macrophages (edema).

Bone marrow (slide 3; 1 fragmented section): The bone marrow is hypocellular, all 3 lines are represented. The myeloid to erythroid ratio is 5:1. Scattered throughout are pale basophilic, stringy to foamy, acellular aggregates (serous atrophy of fat).

Spleen (slide 3; 1 section): The white pulp is poorly represented, hypocellular with obvious reticular meshwork visible (lymphoid depletion). There is a moderate number of tingible body macrophages scattered throughout (lymphocytolysis). Numerous macrophages, occasionally clustered are noted throughout.

### Necropsy, Gross

Pathologist: Gerald E. Duhamel, DVM, Ph.D, Dipl. ACVP

Resident Pathologist: Alina Demeter, DVM, Ph.D

1 Male - Feline Feline, Nos Male  
Gross Report

### Preliminary Diagnosis:

Emaciation

### Preliminary Comment:

Gross examination does not reveal a cause for the demise of this young Serval. There is no gross evidence of an infectious process, and the main gross finding is emaciation. The stomach is empty and only minimal mucoid material is found in the intestinal tract. The small focal area in the heart is suggestive of a parasitic cyst; however, histological examination is required in order to confirm this interpretation.

The lymphoid hyperplasia in the spleen is a common finding in young animals and likely incidental.

Histopathological examination is pending and results will follow in a final report.

### Gross Findings:

Body as a whole: Emaciation

Heart: Mild, focal parasitic cyst, presumptive

Lungs: Moderate, multifocal atelectasis

Spleen: Multifocal lymphoid hyperplasia

### Gross Description:

Examined is the body of a 9-week-old, 0.7 kg, intact male Serval (*Leptailurus serval*) in poor body condition (3 out of 9 modified Purina body condition score) and moderate postmortem autolysis. All vertebrae and bony prominences are easily palpable. There is minimal adipose tissue throughout the body and the globes are sunken into the orbits (emaciation). There is a small amount of brown, granular, material in the external ear canals.

Near the apex of the left ventricle is a slightly raised, tan, glistening, poorly demarcated 0.5 x 0.2 cm area (parasitic cyst, presumptive). The margin of the left caudal lung lobe has an approximately 0.5 cm depressed, dark red, and mildly rubbery area (atelectasis). Similar areas of atelectasis are on the caudal part of the left cranial lung lobe and ventral margins of the right lung lobes.

The spleen has a dozen dark red, slightly raised nodules ranging from pinpoint to 0.3 cm in diameter (lymphoid hyperplasia).

The mucosa of the stomach is coated with a thin, white-yellow, mucoid material. The small intestine contains approximately 2.0 mL of thin, mucoid fluid, evenly distributed. The colon contains approximately 4.0 mL of yellow, pasty to gelatinous material. There are no formed feces in the distal colon.

**ALERT:** Please be advised that due to extreme heat being experienced over central and eastern United States, the AHDC is recommending removing serum from clot tubes or serum separator tubes prior to shipping to avoid hemolysis and in general increasing the number of freezer packs used for sample shipping. Whenever freezer packs are indicated, insulated shipping containers should be used.



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Owner: Christopher Casacci

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## Interim Report

Accession Number: 119055-18

Summer Street Cat Clinic - (2437)  
Dr Patricia Adams  
2323 N Forest Rd  
Getzville, NY 14068  
(716) 689-2287

Sampled: 06/29/2018  
Received: 06/30/2018  
Finalized:

*Mr. Ears*

### Accession Comments

2nd deceased in litter, please see #115730-18 for original accession mla21

### Anatomic Pathology

Department of Biomedical Sciences  
Director Dr. Teresa Southard  
Phone: 607-253-3319 | Fax: 607-253-3357

1 Male 10 Weeks - Feline Feline, Nos Male

Body, Whole

Necropsy, Final

Pathologist: Gerald E. Duhamel, DVM, Ph.D, Dipl. ACVP

Resident Pathologist: Alina Demeter, DVM, Ph.D

Final Report

### Final Diagnoses:

Sepsis

Encephalitis

### Final Comment:

The findings in the brain and liver of this Serval are most compatible with a disseminated bacterial infection (sepsis); however, bacteriological culture would be required in order to confirm this interpretation. Other causes of disseminated inflammation and necrosis including toxoplasmosis cannot be ruled out completely. If aerobic bacteriological culture is desired, please contact the Anatomic Pathology service office in writing either via fax to (607) 253-3357 or email to [pathologyservice@cornell.edu](mailto:pathologyservice@cornell.edu) and quote case number 119055-18.

The severe lymphoid depletion in the spleen, lymph nodes and Peyer's patches in the small intestine is most likely attributable to severe stress; however, an underlying viral infection might account for this change. An immunohistochemical stain for detection of feline coronavirus antigen in sections of small intestine and lymph node (slide 4) is pending and results will follow in an addendum to this report.

1 Male 10 Weeks - Feline Feline, Nos Male

### Histologic Findings:

Brain: Mild, focal, acute, neutrophilic encephalitis

Liver: Moderate, multifocal, subacute, lymphoplasmacytic and neutrophilic cholangiohepatitis with hepatocellular necrosis and Kupffer cell hyperplasia

Spleen, lymph node: Severe lymphoid depletion and lymphocytolysis

### Histologic Description:

The following tissues are examined:

Slide 1: Spleen, lung, liver, lymph node

Slide 2: Heart, pancreas, lymph node

Slide 3: Lung, kidney

Slide 4: Mesenteric lymph node, small intestine

Slides 5, 6: Brain

Histopathologic changes are detected in these tissues:

Spleen (slide 1; 1 section): The white pulp is diffusely hypocellular (depletion) and scattered throughout are numerous tingible body macrophages and debris in the center of lymphoid follicles (lymphocytolysis).

Liver (slide 1; 2 sections): Throughout both sections, the sinusoids are expanded by red blood cells (congestion). There is a moderate number of plump Kupffer cells throughout (hyperplasia). In multiple areas, randomly distributed are small aggregates of lymphocytes and plasma cells along with rare neutrophils admixed with minimal cellular debris in the sinusoids. Similar inflammatory cells are surrounding the portal tracts, and occasionally extending beyond the limiting plate.

Lymph node (slide 1; 1 section): There is poor cortex to medulla distinction; the cortex is hypocellular with poorly represented lymphoid follicles (depletion). Scattered throughout are numerous tingible body macrophages. Frequently the lymphoid follicles have cellular debris in the center (lymphocytolysis).

Small Intestine (slide 4; 2 sections): In multiple areas of lymphoid follicles are poorly represented and hypocellular with obvious reticular meshwork (lymphoid depletion).

Brain (slide 6; 1 section): A single focal area within the white matter of the cerebral cortex has a large aggregate of neutrophils, along with rare lymphocytes, glial cells and cellular debris (encephalitis).

### Necropsy, Gross

Pathologist: Gerald E. Duhamel, DVM, Ph.D, Dipl. ACVP

Resident Pathologist: Alina Demeter, DVM, Ph.D

### Gross Report

### Preliminary Diagnosis:

Emaciation

### Preliminary Comment:

## 1 Male 10 Weeks - Feline Feline, Nos Male

The main gross finding is emaciation similar to a previously submitted Serval (115730-18). There is no feed material in the stomach and only mucoid material is found in the small intestine with minimal contents in the large intestine.

Histopathological examination is pending and results will follow in a final report.

**Gross Findings:**

Body-as-a-whole: Emaciation

Heart, abdominal cavity: Moderate, locally extensive serous atrophy of fat

**Gross Description:**

Examined is the body of a 10-week-old, 0.9 kg, male intact Serval (*Leptailurus serval*) in poor body condition (2 out of 9 modified Purina scale), and moderate postmortem autolysis. The vertebrae and bony prominences are easily palpable and there is no adipose tissue throughout including the subcutaneous tissues. The mucous membrane and skin are pale to white.

Along the coronary groove of the heart is poorly demarcated, gelatinous, pink, moist, partially translucent material, approximately 3.0 x 1.5 x 0.2 cm (serous atrophy of fat). Serous atrophy of fat is also present along the abdominal aorta, adjacent to the left kidney.

The stomach is coated with a thin layer of yellow, mucoid material. There is no feed material in the stomach. The small intestine contains approximately 1.5 mL of thin, mucoid fluid, evenly distributed. The large intestine contains approximately 2.0 mL of pasty, white to grey material. There are no formed feces in the distal colon.

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